JVC

SERVICE MANUAL

STEREO INTEGRATED AMPLIFIER

MODEL A-K300/A-K300B

Model	Color Version
A-K300	Silver
A-K300B	Black

Contents

This manual combines two single volumes; Service manual and Parts list.

No. 2738
Feb. 1984

Safety Precautions

1. The design of this product contains special hardware, many circuits and components specially for safety purposes.
   For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list in Service manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and/or the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard.
   When service is required, the original lead routing and dress should be observed, and they should be confirmed to be returned to normal, after reassembling.
5. Leakage current check
   (Safety for electrical shock hazard)
   After reassembling the product, always perform an isolation check on the exposed metal parts of the Products (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5 mA AC (r.m.s.).
   - Alternate check method.
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15 μF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.).
     This corresponds to 0.5 mA AC (r.m.s.).

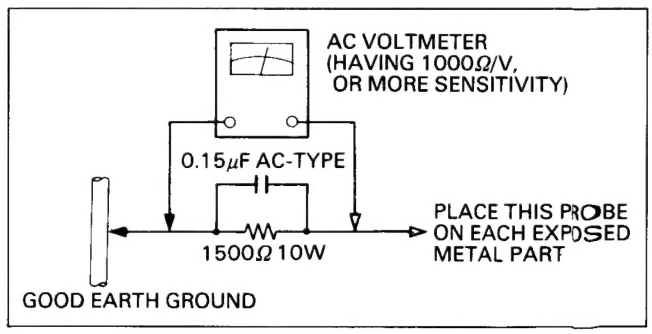


Fig. 1

Service Precautions

1. Before repairing, be sure to discharge electric capacitors across a resistor of about 100 ohms/1 watt.

1. Specifications

CIRCUITRY

ALLOVER CHARACTERISTICS

Output power (AUX IN SP. OUT)
U. S. A. & Canada 65W
Other countries58W

1 kHz	: 55 watts RMS per channel min. (8 ohms, 0.005% total harmonic distortion measured by JVC Audio Analyze System)
40 Hz – 20 kHz	: 65 watts RMS per channel min. (both channels driven into 8 ohms from 40 Hz to 20 kHz, with no more than 0.2% total harmonic distortion.) (U. S. A. & Canada only)
Total harmonic distortion	
AUX IN SP. OUT	: 0.2% (40 Hz – 20 kHz, 8 ohms) at 65 watts
Power band width (AUX IN SP. OUT)	: 10 Hz – 30 kHz ('66 IHF, 0.2%, 8 ohms both channels driven)
Frequency characteristic	: 10 Hz – 100 kHz +0.5, –3 dB (8 ohms)
Input terminals	
Input sensitivity/impedance (1 kHz)	
PHONO	: 2.5 mV/47 kohms
DAD, TUNER, AUX, TAPE	: 150 mV/40 kohms
Signal-to-noise ratio	
PHONO	: 70 dB ('66 IHF)
DAD, TUNER, AUX, TAPE	: 96 dB ('66 IHF)
PHONO	: 79 dB ('78 IHF, Rec Out)
DAD TUNER, AUX, TAPE	: 73 dB ('78 IHF, Speaker Out)
Tone controls	: TREBLE: ±8 dB (10 kHz) BASS: ±8 dB (100 Hz)
Loudness controls	: 100 Hz: +6 dB/10 kHz: +4 dB (at VOLUME –30 dB)

EQUALIZER

PHONO overload	: 100 mV
PHONO RIAA deviation	: ±1 dB (40 Hz – 15 kHz)

GENERAL

Power source :

Areas	Line Voltage & Frequency	Power consumption
U.S.A. & Canada	AC 120V ∿, 60 Hz	210 watts 270 VA
Europe	AC 220V ∿, 50 Hz	150 watts
U.K. & Australia	AC 240V ∿, 50Hz	150 watts
U.S. Military Market & Other Countries	AC 110/120/220/240V∿ Selectable 50/60 Hz	150 watts

Dimensions and Weight :

Dimensions (cm)			Weight
Height	Width	Depth	(kg/lbs)
11.7 (4-5/8")	43.5 (17-1/8")	30.4 (11-15/16")	5.7/12.5

Design and specifications subject to change without notice.

2. Removal and Reassembly Procedures

2-(1) Metal Cover Section

1. Remove 6 screws securing the metal cover (4 on each side of the cover and 2 on the rear).
2. Pull out the metal cover backwards.

2-(2) Front Panel Section

1. Pull out the plastic rivet bushes by pressing it from the bottom plate. (Fig. 2)
2. Remove 3 screws from the bottom plate.

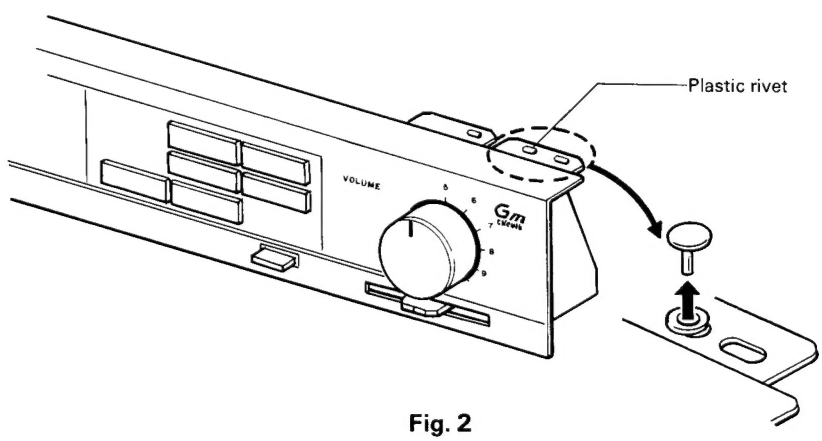


Fig. 2

2-(3) Level Indicator P. C. Board Section

1. Remove the metal cover. (Refer to step 1 . of Metal Cover Section).
2. Remove the plastic rivet bushes from the P. C. Board and take out P. C. Board. (Fig. 3)

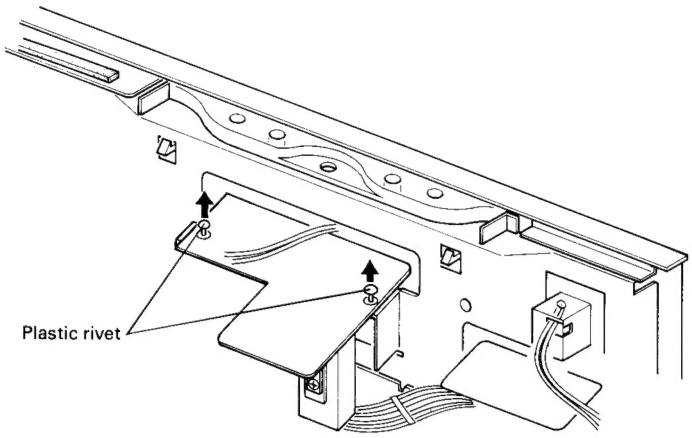


Fig. 3

2-(4) Power Transistor Section

1. Remove the metal cover. (Refer to step 1. of Metal Cover Section.)
2. Remove 2 screws from each main P. C. Board bracket.
3. Pull out the main P. C. Board in the direction of the arrow shown in Fig. 4, taking care that the board does not contact P. C. Board.

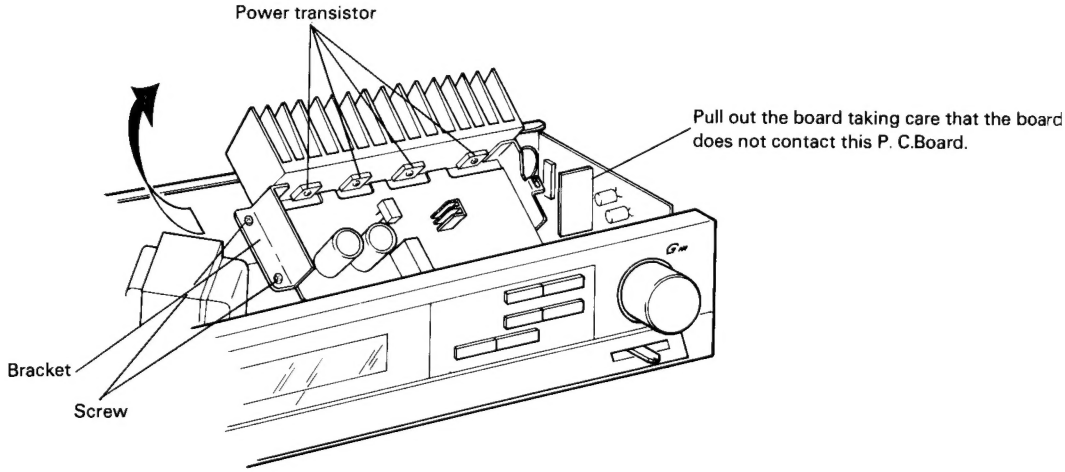


Fig. 4

3. Adjustment Procedures

3-(1) Power Level Indicator Adjustment

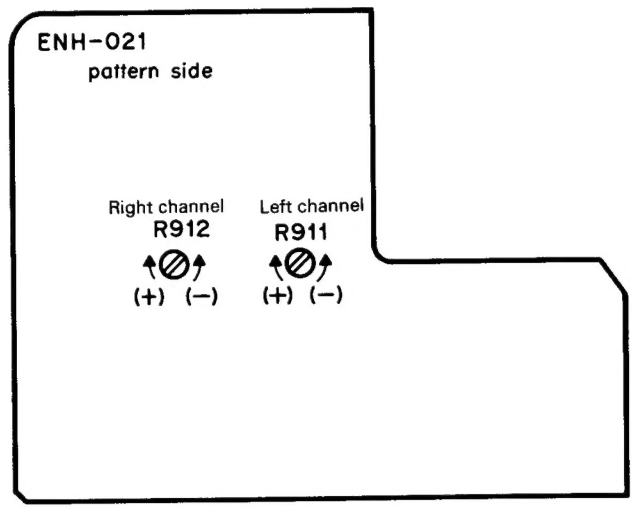


Fig. 5

Power Level Indicator Adjustment

1. Turn the semi-fixed resistors (R911, R912) counterclockwise fully, before switching the power ON.
2. With the output voltage at 14.1V 1 kHz, adjust the indicator so that its −3 dB point lights.
   Left channel : R911
   Right channel: R912

3-(2) Power Amplifier Idling Current Adjustment

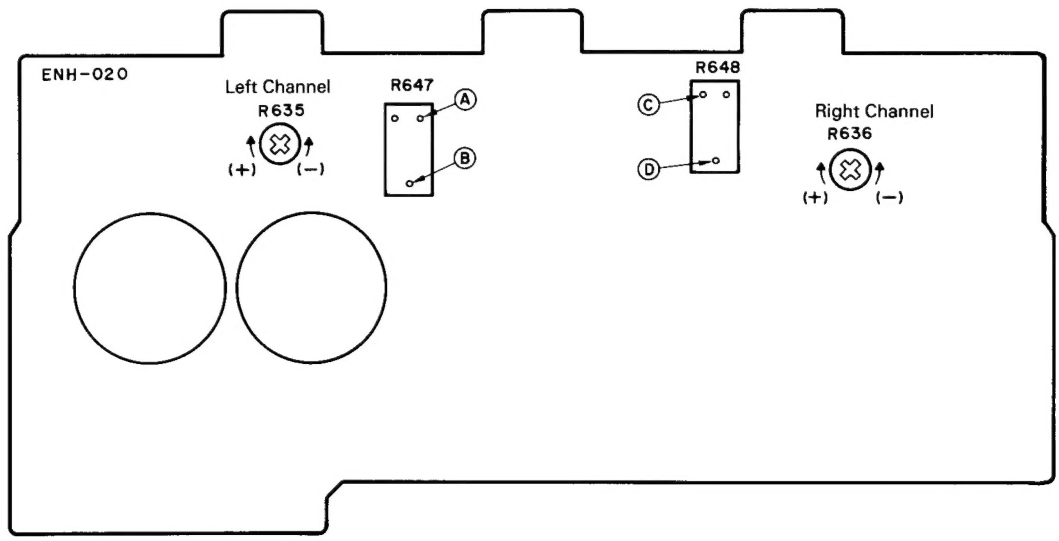


Fig. 6

1. Before turning on the power, turn the semi-fixed resistors (R635 for L channel and R636 for R channel) of the power amplifier circuit board fully counterclockwise.
2. Adjust the semi-fixed resistors (R635 and R636) so that the voltage at the following test points of the power amplifier circuit board is within a range of 1 mV ~ 2 mV after the power is turned on.
   L channel: Measure the voltage between test point Ⓐ (emitter of Q617) and output at the test point Ⓑ.
   R channel: Measure the voltage between test point Ⓒ (emitter of Q618) and output at the test point Ⓓ.
3. Readjust resistors R635 and R636 about 5 minutes after the power is turned on (the heatsink temperature must be sufficiently high) so that the voltage at the test points becomes 3 mV.
   Confirm that the voltage does not vary when the heatsink temperature increases further.
   Note: Be sure to perform the measurement with the probes and cabinet of the measuring equipment separated from the grounding terminals of A-K300 or other measuring equipment.

4. Block Diagram

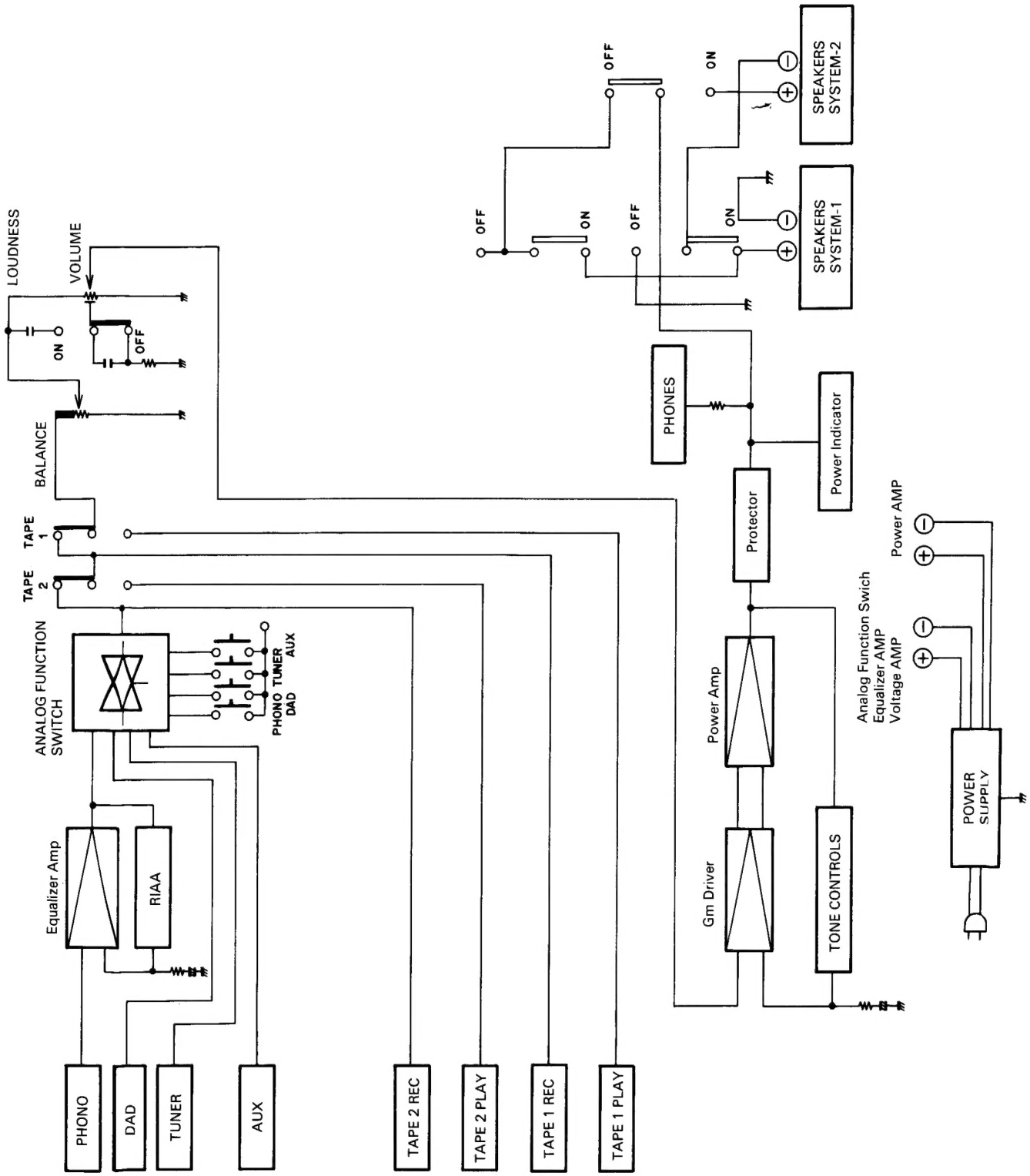
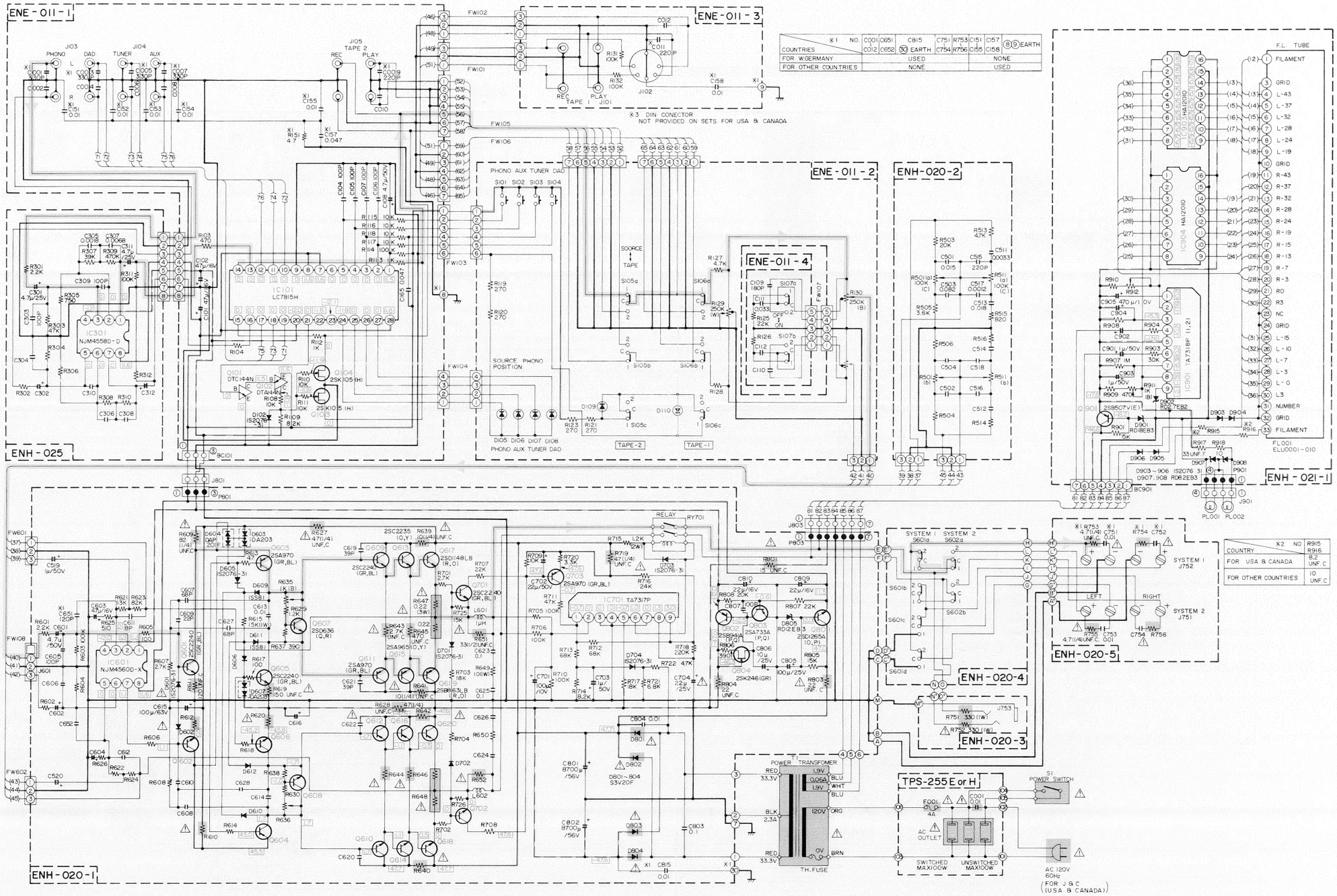


Fig. 7

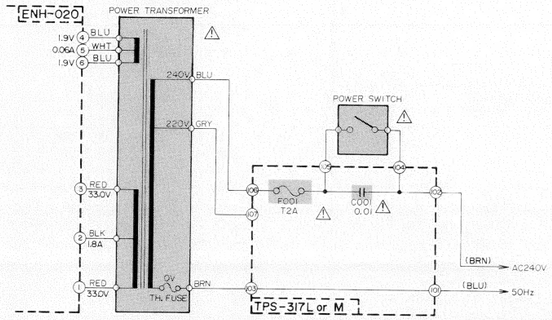
5. A-K 300 Schematic Diagram



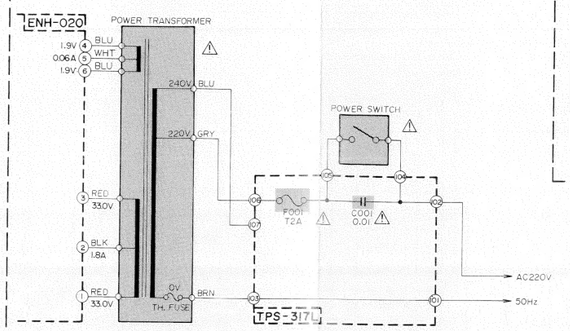
Notes:

1. ——— indicates positive B power supply.
2. – – – – – indicates negative B power supply.
3. ▒▒▒ indicates signal path.
4. When replacing the parts in the darkned area (▭) and those marked with ⚠, be sure to use the designated parts to ensure safety.
5. This is the standard circuit diagram.
   The design and contents are subject to change without notice.

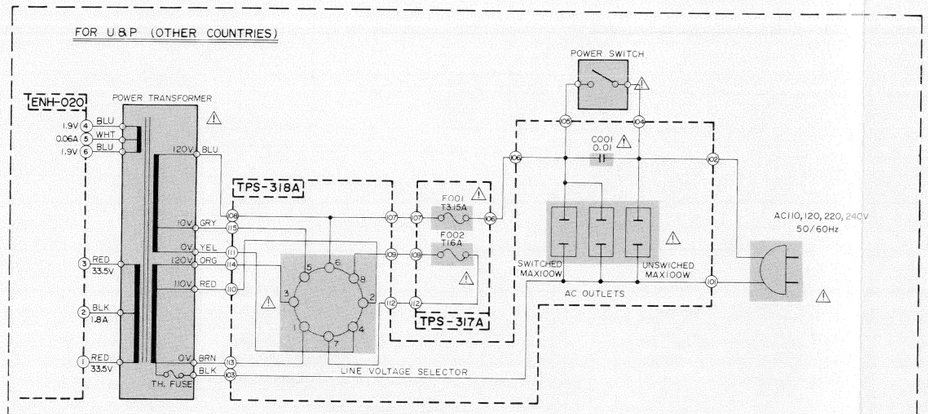
FOR BS & A (U.K & AUSTRALIA)



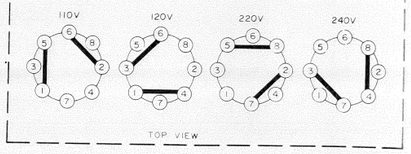
FOR E & G (EUROPE & WEST GERMANY)



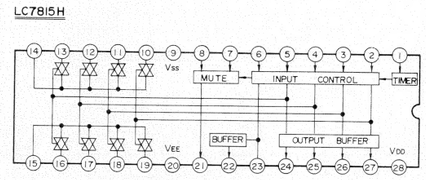
FOR U & P (OTHER COUNTRIES)



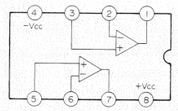
VOLTAGE SELECTOR CONNECTION



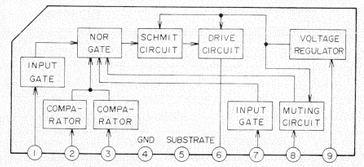
LC7815H



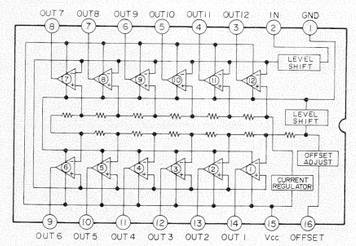
NJM4558D-D
NJM4560D-X



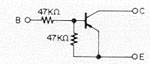
TA7317P



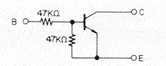
HA12010

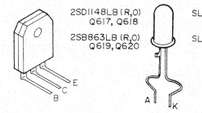


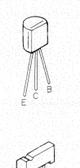
DTA144N

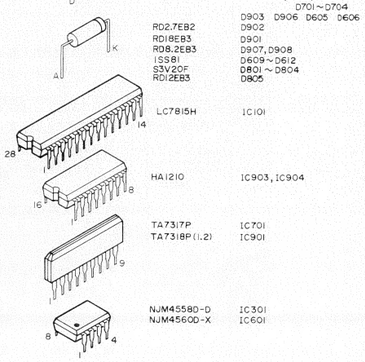


DTC144N







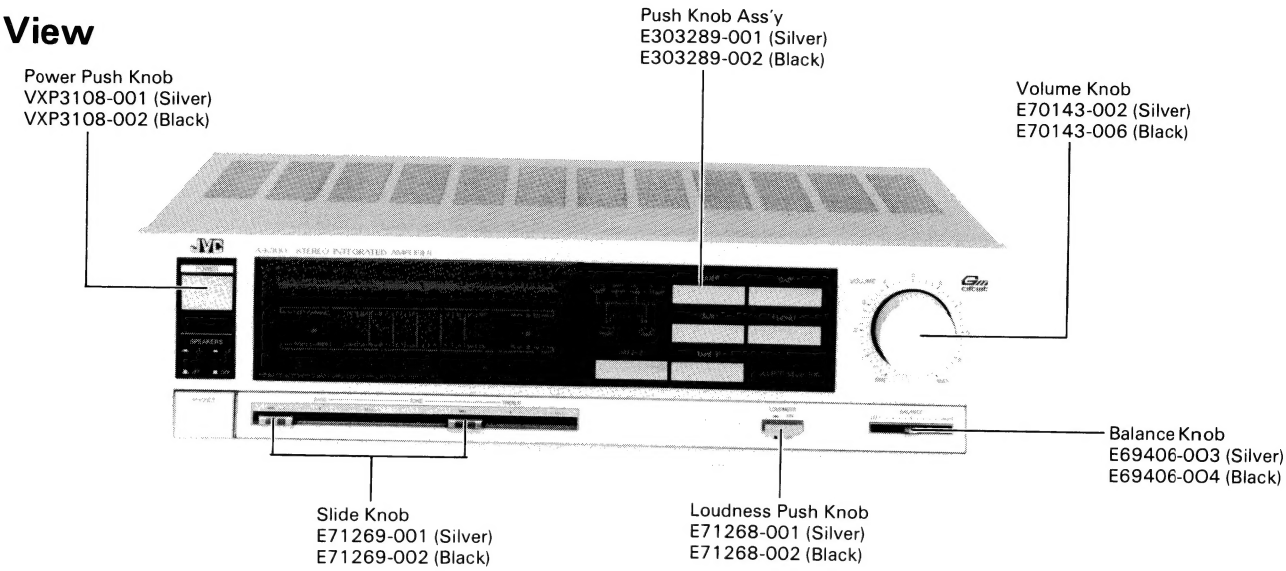


PARTS LIST

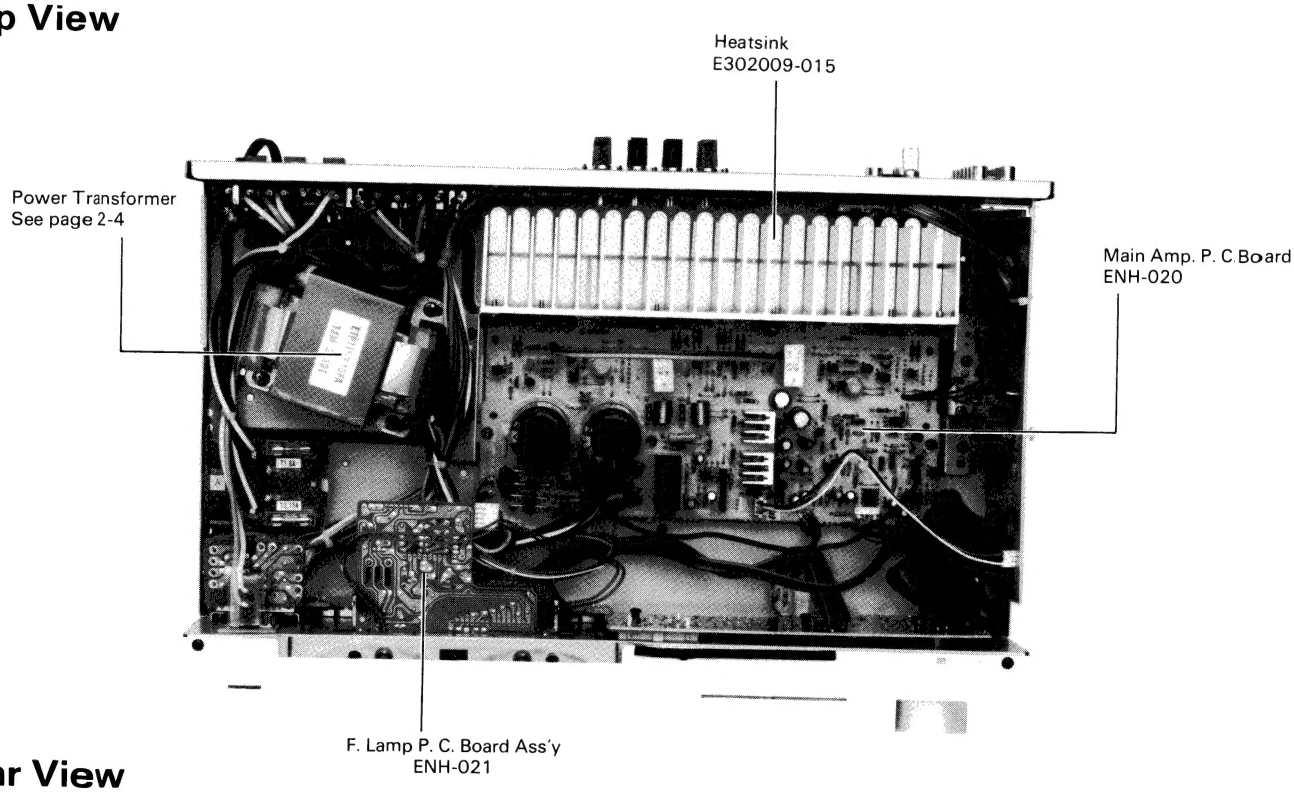
Contents

1. Main Parts Locations

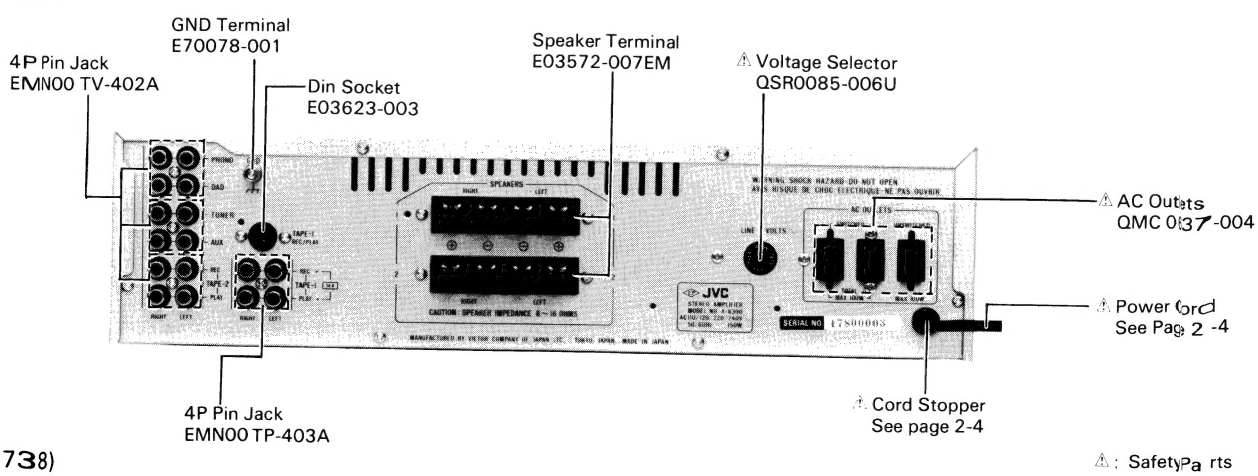
Front View



Top View



Rear View



⚠ : Safety Parts

2. Exploded View and Part Numbers List

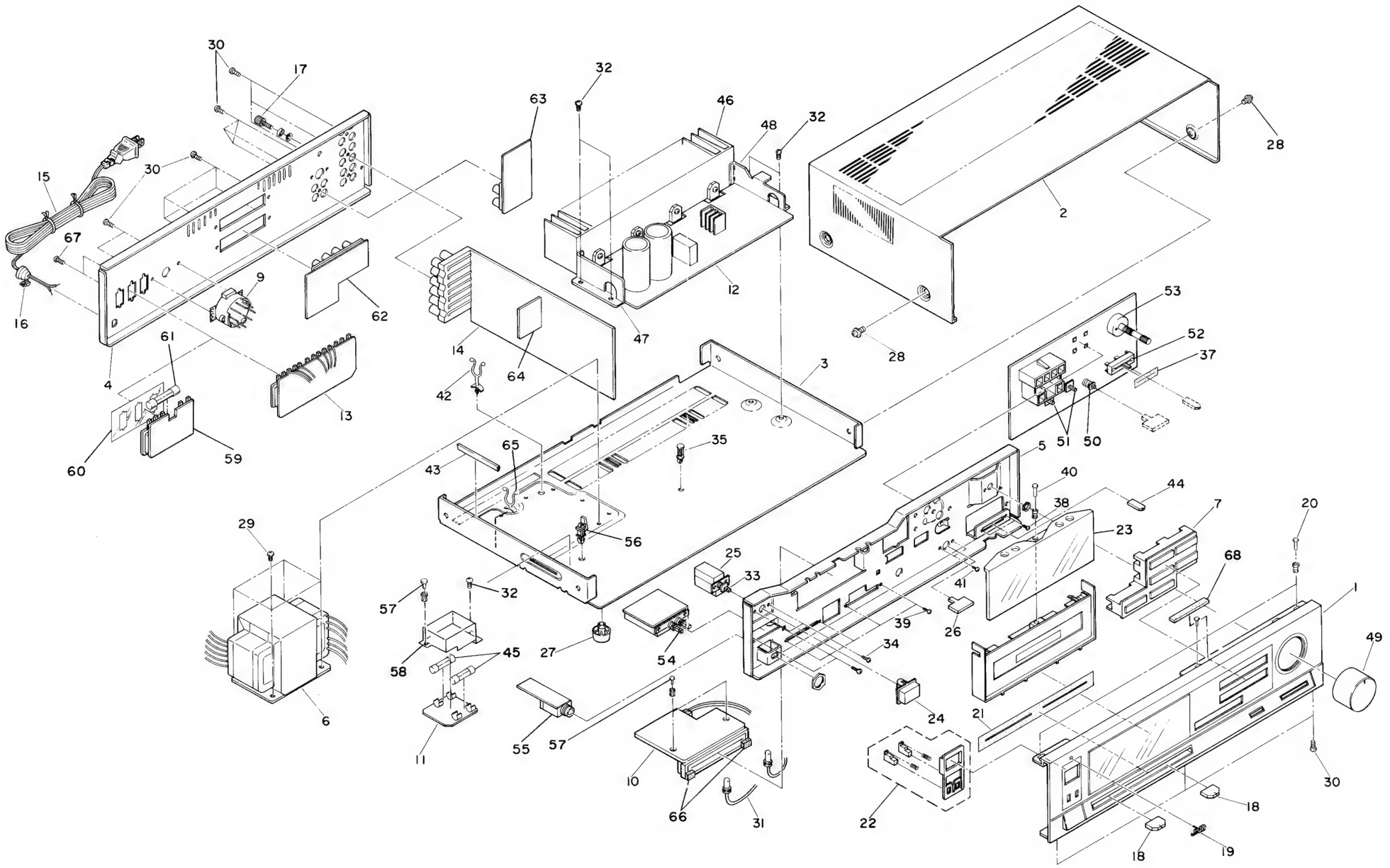


Fig. 1

The Marks for Designated Areas

J	U. S. A.	A	Australia
C	Canada	P, PG	U. S. Military Market
E	Europe	BS	U. K.
G	West Germany	U	Other Countries

No mark indicates all areas.

No.	Part Number	Part Name	Q'ty	Description	Area
1	EFP-AK300E	Front Panel	1	(S)	
	EFP-AK300BE	Front Panel	1	(B)	
2	E24721-001	Metal Cover	1	(S)	
	E24721-002	Metal Cover	1	(B)	
3	E10717-005	Chassis Base	1		
4	E24127-012	Rear Panel	1	(S)	J, C
	E24127-013	Rear Panel	1	(S)	E, G, A, BS
	E24127-014	Rear Panel	1	(S)	U, P, PG
	E24127-015	Rear Panel	1	(B)	J, C
	E24127-016	Rear Panel	1	(B)	E, G, A, BS
	E24127-017	Rear Panel	1	(B)	U, P, PG
5	E10979-001	Front Bracket	1		
6 ⚠	ETP1150-15JA	Power Transformer	1		J
⚠	ETP1150-15CA	Power Transformer	1		C
⚠	ETP1150-15FA	Power Transformer	1		U, P, PG
⚠	ETP1150-15EA	Power Transformer	1		E, G, A
⚠	ETP1150-15EABS	Power Transformer	1		BS
7	E303289-001	Push Knob Ass'y	1	(S), Source	
	E303289-002	Push Knob Ass'y	1	(B), Source	
8	E71448-005	H. P. ESC Ass'y	1	(S)	
	E71448-006	H. P. ESC Ass'y	1	(B)	
9 ⚠	QSR0085-006U	Voltage Selector	1		U, P, PG
10	ENH-21D	FL Meter Unit	1	See page 2-12	J, C
	ENH-21E	FL Meter Unit	1		U, P, PG, E, G, A, BS
11	TPS-317A	Fuse Unit	1	See page 2-13	U, P, PG
	TPS-317A	Fuse Unit	1		U, P, PG
	TPS-317L	Fuse Unit	1		E, G, A
	TPS-317MBS	Fuse Unit	1		BS
12	ENH-020E	M. Amp Unit	1	(S) See page 2-6	J, C, U, P, PG, E, A, BS
	ENH-020F	M. Amp Unit	1	(S)	G
	ENH-020G	M. Amp Unit	1	(B)	J, C, U, P, PG, E, A, BS
	ENH-020H	M. Amp Unit	1	(B)	G
13	TPS-318	Voltage Sel. Unit	1	See page 2-14	J, C
14	ENE-011A	EQ Amp Unit	1	See page 2-10	J, C
	ENE-011B	EQ Amp Unit	1		U, P, PG, E, A, BS
	ENE-011C	EQ Amp Unit	1		G
15 ⚠	QMP1200-200	Power Cord	1		J
⚠	QMP1900-200	Power Cord	1		C
⚠	QMP7600-250	Power Cord	1		U, P, PG
⚠	QMP3900-200	Power Cord	1		E, G
⚠	QMP2560-244	Power Cord	1		A
⚠	QMP9017-008BS	Power Cord	1		BS
16 ⚠	QHS3876-162	Cord Stopper	1		J, C, U, PG, E, A, G
⚠	QHS3876-162BS	Cord Stopper	1		BS
17	E70078-001	GND Terminal	1		
18	E71269-001	Slide Knob	2	(S), Tone	
	E71269-002	Slide Knob	2	(B), Tone	
19	E70913-001	JVC Mark	1	(B)	
	E70913-002	JVC Mark	1	(S)	
20	E48729-009	Plastic Rivet	3	Front Panel	

⚠ : Safety Parts
(S) and (B) in the Description Column indicate silver and black versions.

No.	Part Number	Part Name	Q'ty	Description	Area
21	E71455-001	Felt Spacer	1		
22	E303287-001	Push Knob Ass'y	1	(S)	
	E303287-002	Push Knob Ass'y	1	(B)	
23	E303297-001	Scale	1		
24	VXP3108-001	Power Push Knob	1	(S)	
	VXP3108-002	Power Push Knob	1	(B)	
25 ⚠	E71004-001	Switch Cover	1		
26	E71268-001	Push Knob	1	(S) Loudness	
	E71268-002	Push Knob	1	(B) Loudness	
27	E301258-002	Foot	4		
28	E61660-001	Special Screw	4	(S)	
	E61660-004	Special Screw	4	(B)	
29	E65389-002	Ass'y Screw	4	Transformer	
30	SBSB3008N	Tapping Screw	4		
	SBSB3008N	Tapping Screw	8	SPK, Pin Jack	
	SBSB3008N	Tapping Screw	2	Din	
	SBSB3008N	Tapping Screw	3	Front Panel	
31	E03872-020	Lamp Ass'y	1		
32	E65119-001	Special Screw	5	Power Amp, P. Cover	
33 ⚠	QSP1106-004	Power Switch	1		
34	E65119-001	Special Screw	2		
35	E69384-002	Fastener	1		
37	E71454-001	Felt Spacer	1		
38	SPST2604	Tapping Screw	2	Balance	
39	E70053-001	Screw	4	Tone	
40	E48729-001	Plastic Rivet	1	Scale	
41	E65119-001	Special Screw	2	Loudness	
42	QHW115-001	Wire Clamp	1		
43	E65778-002	Spacer	1		
44	E69406-003	Balance Knob	1	(S)	
	E69406-004	Balance Knob	1	(B)	
45 ⚠	QMF51A2-3R15S	Fuse	1	F001	U, P, PG
⚠	QMF51A2-1R6S	Fuse	1	F002	U, P, PG
⚠	QMF51A2-2ROL	Fuse	1	F001	E, G, A
⚠	QMF51A2-2ROLBS	Fuse	1	F001	BS
46	E302009-015	Heatsink	1		
47	E67292-001	Bracket	1		
48	E67293-002	Bracket	1		
49	E70143-002	Volume Knob	1	(S)	
	E70143-006	Volume Knob	1	(B)	
50	QST2101-E08	Push Switch	1		
51	QST2101-E01	Push Switch	2		
52	QVZ5205-001	Variable	1		
53	QVN9A3B-5F5V	Variable	1		
54	QST4241-E05	Push Switch	1		
55	QMS6302-125	Headphone Jack	1	(S)	
	QMS6302-128	Headphone Jack	1	(B)	
56	E34455-001	Fastener	1		
57	E48729-008	Plastic Rivet	2		
58	E303419-001	Protector Cover	1		E, A, BS
59	TPS-255E, H	AC Outlet P. C. Board	1	See page 2-14	J, C
60	E69589-001	Spacer	1		J
61	QMF61U1-4RO	Fuse	1		J, C
62	ENH-020	P. C. Board Ass'y	1	Speaker Terminal	
63	ENH-011	P. C. Board Ass'y	1	Pin Jack	
64	ENH-025	Module P. C. BoardAss'y	1	See page 2-14	
65	QHW2052-001	Wire Clamp	1		
66	EXO01005H10S	Felt Spacer	2		
67	SDSB3008N	Tapping Screw	2	(S)	
	SDSB3008M	Tapping Screw	2	(B)	
68	EXO00005N20S	Felt Spacer	1		

⚠ : Safety Parts
(S) and (B) in the Description Column indicate silver and black versions.

3. Printed Circuit Board Ass'y and Parts List

3-(1) ENH-020 □ Main Amp. P. C. Board Ass'y
Note: ENH-020 □ varies according to the areas employed. See note (1) when placing an order.

Note (1)

Designated Areas	P.C. Board Ass'y
U.S.A., Canada Europe, Australia, U.K., U.S. Military Market and Other Countries	ENH-020 [E], [G]
West Germany	ENH-020 [F], [H]

Note (2)
ENH-020 [E] and [G] are provided for silver version models.
ENH-020 [F] and [H] are provided for black version models.

Note (3)
The symbols (赤、黒、白..... etc.) on P.C. Board surface are factory process only.

Note (4)
The column marked with □ indicates the area.
No mark..... All areas
G..... West Germany

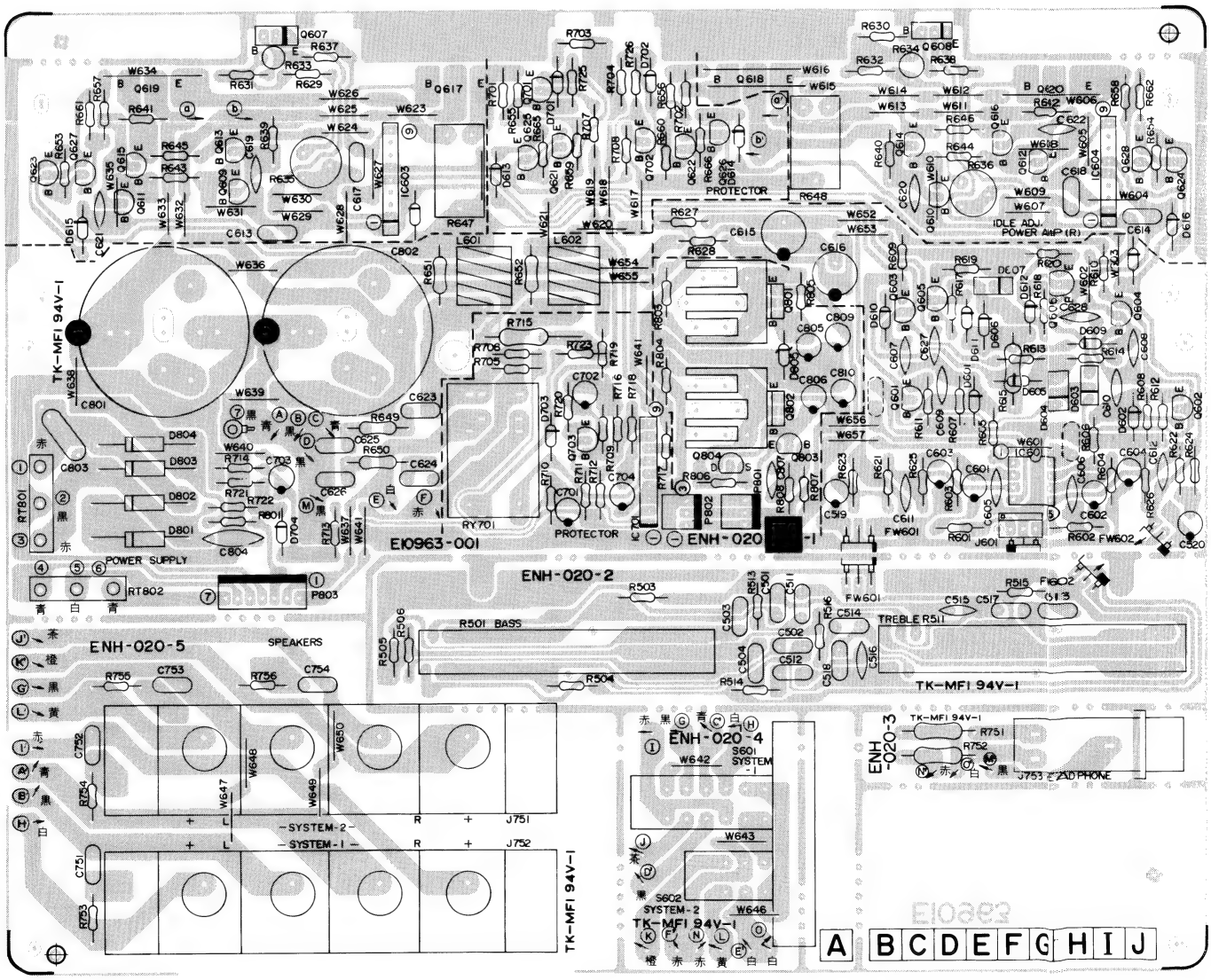
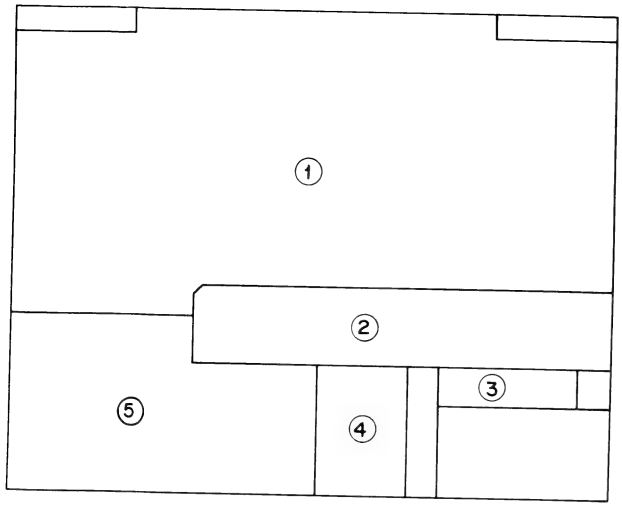


Fig. 2

Each Individual P.C. Board Location



① Power Supply and Premain Amp. P. C. Board Ass'y
② Tone P. C. Board Ass'y
③ Headphone P. C. Board Ass'y
④ Speaker Switch P. C. Board Ass'y
⑤ Speaker Terminals P. C. Board Ass'y

Fig. 3

Transistors

Item No.	Part Number	Description		□
			Maker	
Q601	2SC2240 (GR, BL)	Silicon	Toshiba	
Q602	2SC2240 (GR,BL)	Silicon	Toshiba	
Q603	2SA970 (GR, BL)	Silicon	Toshiba	
Q604	2SA970 (GR, BL)	Silicon	Toshiba	
Q605	2SC2240 (GR, BL)	Silicon	Toshiba	
Q606	2SC2240 (GR, BL)	Silicon	Toshiba	
Q607	2SD636 (Q, R)	Silicon	Matsushita	
Q608	2SD636 (Q, R)	Silicon	Matsushita	
Q609	2SC2240 (GR, BL)	Silicon	Toshiba	
Q610	2SC2240 (GR, BL)	Silicon	Toshiba	
Q611	2SA970 (GR, BL)	Silicon	Toshiba	
Q612	2SA970 (GR, BL)	Silicon	Toshiba	
Q613	2SC2235 (O, Y)	Silicon	Toshiba	
Q614	2SC2235 (O, Y)	Silicon	Toshiba	
Q615	2SA965 (O, Y)	Silicon	Toshiba	
Q616	2SA965 (O, Y)	Silicon	Toshiba	
Q617	2SD1148 LB (R, O)	Silicon	Toshiba	
Q618	2SD1148 LB (R, O)	Silicon	Toshiba	
Q619	2SB863 LB (R, O)	Silicon	Toshiba	
Q620	2SB863 LB (R, O)	Silicon	Toshiba	
Q701	2SC2240 (GR, BL)	Silicon	Toshiba	
Q702	2SC2240 (GR, BL)	Silicon	Toshiba	
Q703	2SC970 (GR, BL)	Silicon	Toshiba	
Q801	2SD1265A (O, P)	Silicon	Matsushita	
Q802	2SB941A (P, Q)	Silicon	Matsushita	
Q803	2SA733A (P, Q)	Silicon	NEC	
Q804	2SK246 (G, R)	F, E, T	Toshiba	

Diodes

Item No.	Part Number	Description		□
			Maker	
D601	1S2076-31	Silicon	Hitachi	
D602	1S2076-31	Silicon	Hitachi	
D603	DA203F	Silicon	Rohm	
D604	DA201F	Silicon	Rohm	
D605	1S2076-31	Silicon	Hitachi	
D606	1S2076-31	Silicon	Hitachi	
D607	DA203F	Silicon	Rohm	
D609	1SS81	Silicon	Rhom	
D610	1SS81	Silicon	Rhom	
D611	1SS81	Silicon	Rhom	
D612	1SS81	Silicon	Rhom	
D613	1S2076-31	Silicon	Hitachi	
D614	1S2076-31	Silicon	Hitachi	
D615	1S2076-31	Silicon	Hitachi	
D616	1S2076-31	Silicon	Hitachi	
D701	1S2076-31	Silicon	Hitachi	
D702	1S2076-31	Silicon	Hitachi	
D703	1S2076-31	Silicon	Hitachi	
D704	1S2076-31	Silicon	Hitachi	
D801	S3V20F	Silicon	Shindengen	
D802	S3V20F	Silicon	Shindengen	
D803	S3V20F	Silicon	Shindengen	
D804	S3V20F	Silicon	Shindengen	
D805	RD12EB3	Zener	NEC	
D901	1S2076-31	Silicon	Hitachi	

IC

Item No.	Part Number	Description		□
			Maker	
IC601	NJM4560D-X		JRC	
IC701	TA7317P		Toshiba	

Capacitors

Item No.	Part Number	Description			□
C501	QFN31HK-153Z	Mylar	0.015μ	50V	
C502	QFN31HK-153Z	Mylar	0.015μ	50V	
C503	QFN31HK-823Z	Mylar	0.082μ	50V	
C504	QFN31HK-823Z	Mylar	0.082μ	50V	
C511	QFN31HK-332Z	Mylar	3300P	50V	

⚠ : Safety Parts
The column maked with □ indicates the area.
Parts without character in the column are used commonly regardless of delivery area.

Capacitors

Item No.	Part Number	Description			□
C512	QFN31HK-332Z	Mylar	3300P	50V	
C513	QFN31HK-183Z	Mylar	0.018μ	50V	
C514	QFN31HK-183Z	Mylar	0.018μ	50V	
C515	QCS31HJ-221Z	Ceramic	220P	50V	
C516	QCS31HJ-221Z	Ceramic	220P	50V	
C517	QFN31HK-122Z	Mylar	1200μ	50V	
C518	QFN31HK-122Z	Mylar	1200μ	50V	
C519	QETC1HM-105Z	Electro	1μ	50V	
C520	QETC1HM-105Z	Electro	1μ	50V	
C601	QETC1HM-475Z	Electro	4.7μ	50V	
C602	QETC1HM-475Z	Electro	4.7μ	50V	
C603	QETC1CM-476Z	Electro	47μ	16V	
C604	QETC1CM-476Z	Electro	47μ	16V	
C605	QCS31HJ-101Z	Ceramic	100P	50V	
C606	QCS31HJ-101Z	Ceramic	100P	50V	
C607	QCS31HJ-680Z	Ceramic	68P	50V	
C608	QCS31HJ-680Z	Ceramic	68P	50V	
C609	QCS31HJ-220Z	Ceramic	22P	50V	
C610	QCS31HJ-220Z	Ceramic	22P	50V	
C611	QCS31HJ-180Z	Ceramic	18P	50V	
C612	QCS31HJ-180Z	Ceramic	18P	50V	
C613	QFN31HP-103Z	Mylar	0.01μ	50V	
C614	QFN31HP-103Z	Mylar	0.01μ	50V	
C615	QETB1JM-476	Mylar	47μ	63V	
C616	QETB1JM-476	Mylar	47μ	63V	
C619	QCS31HJ-390Z	Ceramic	39P	50V	
C620	QCS31HJ-390Z	Ceramic	39P	50V	
C621	QCS31HJ-390Z	Ceramic	39P	50V	
C622	QCS31HJ-390Z	Ceramic	39P	50V	
C623	QFN31HK-104Z	Mylar	0.1μ	50V	
C624	QFN31HK-104Z	Mylar	0.1μ	50V	
C625	QFN31HK-104Z	Mylar	0.1μ	50V	
C626	QFN31HK-104Z	Mylar	0.1μ	50V	
C627	QCS31HJ-680Z	Ceramic	68P	50V	
C628	QCS31HJ-680Z	Ceramic	68P	50V	
C701	QETC1AM-107Z	Electro	100μ	10V	
C702	QETC1HM-226Z	Electro	22μ	50V	
C703	QETC1HM-105Z	Electro	1μ	50V	
C704	QETC1EM-226Z	Electro	22μ	25V	
C751	QFN31HK-103Z	Mylar	0.01μ	50V	G
C752	QFN31HK-103Z	Mylar	0.01μ	50V	G
C753	QFN31HK-103Z	Mylar	0.01μ	50V	G
C754	QFN31HK-103Z	Mylar	0.01μ	50V	G
C801	QEZ0075-878E	Electro	8700μ		
C802	QEZ0075-878E	Electro	8700μ		
C803	QFZ0075-104H	M. Mylar	0.1μ	400V	
C804	QCE22HP-103A	Ceramic	0.01μ	500V	
C805	QETC1EM-107Z	Electro	100μ	50V	
C806	QETC1EM-106Z	Electro	10μ	50V	
C807	QSC31HJ-101Z	Ceramic	100P	50V	
C809	QETC1CM-226Z	Electro	22μ	16V	
C810	QETC1CM-226Z	Electro	22μ	16V	

Coils

Item No.	Part Number	Description	□
L601	EQL0001-1RO	Inductor	
L602	EQL0001-1RO	Inductor	

Resistors

Item No.	Part Number	Description			□
R501	QVZ5020-003	S. Variable			
R503	QRD141J-203S	Carbon	20K	1/4W	
R504	QRD141J-203S	Carbon	20K	1/4W	
R505	QRD141J-362S	Carbon	3.6K	1/4W	
R506	QRD141J-362S	Carbon	3.6K	1/4W	
R511	QVZ5020-003	S. Variable			
R513	QRD141J-472S	Carbon	4.7K	1/4W	
R514	QRD141J-472S	Carbon	4.7K	1/4W	
R515	QRD141J-821S	Carbon	820	1/4W	
R516	QRD141J-821S	Carbon	820	1/4W	
R601	QRD141J-222S	Carbon	2.2K	1/4W	
R602	QRD141J-222S	Carbon	2.2K	1/4W	
R603	QRD141J-104S	Carbon	100K	1/4W	
R604	QRD141J-104S	Carbon	100K	1/4W	
R605	QRD141J-101S	Carbon	100	1/4W	
R606	QRD141J-101S	Carbon	100	1/4W	
R607	QRD141J-272S	Carbon	2.7K	1/4W	
R608	QRD141J-272S	Carbon	2.7K	1/4W	
R609 ⚠	QRD145J-820S	U.N.F. Carbon	82	1/4W	
R610 ⚠	QRD145J-820S	U.N.F. Carbon	82	1/4W	
R611 ⚠	QRD145J-121S	U.N.F. Carbon	120	1/4W	
R612 ⚠	QRD145J-121S	U.N.F. Carbon	120	1/4W	
R613	QRD141J-470S	Carbon	47	1/4W	
R614	QRD141J-470S	Carbon	47	1/4W	
R615 ⚠	QRG012J-153A	O.M. Film	1.2K	1/4W	
R617	QRD141J-101S	Carbon	100	1/4W	
R618	QRD141J-101S	Carbon	100	1/4W	
R619 ⚠	QRD145J-151S	U.N.F. Carbon	15	1/4W	
R620 ⚠	QRD145J-151S	U.N.F. Carbon	15	1/4W	
R621	QRD141J-133S	Carbon	13K	1/4W	
R622	QRD141J-133S	Carbon	13K	1/4W	
R623	QRD141J-823S	Carbon	82K	1/4W	
R624	QRD141J-823S	Carbon	82K	1/4W	
R625	QRD141J-511S	Carbon	510	1/4W	
R626	QRD141J-511S	Carbon	510	1/4W	
R627 ⚠	QRD145J-470S	U.N.F. Carbon	47	1/4W	
R628 ⚠	QRD145J-470S	U.N.F. Carbon	47	1/4W	
R629	QRD141J-122S	Carbon	1.2K	1/4W	
R630	QRD141J-122S	Carbon	1.2K	1/4W	
R635	QVP4A0B-102S	Variable	1K		
R636	QVP4A0B-102S	Variable	1K		
R637	QRD141J-391S	Carbon	390	1/4W	
R638	QRD141J-391S	Carbon	390	1/4W	
R639 ⚠	QRD145J-100S	U.N.F. Carbon	10	1/4W	
R640 ⚠	QRD145J-100S	U.N.F. Carbon	10	1/4W	
R641 ⚠	QRD145J-100S	U.N.F. Carbon	10	1/4W	
R642 ⚠	QRD145J-100S	U.N.F. Carbon	10	1/4W	
R643 ⚠	QRD145J-272S	U.N.F. Carbon	2.7K	1/4W	
R644 ⚠	QRD145J-272S	U.N.F. Carbon	2.7K	1/4W	
R645 ⚠	QRD145J-471S	U.N.F. Carbon	47	1/4W	
R646 ⚠	QRD145J-471S	U.N.F. Carbon	47	1/4W	
R647 ⚠	ERF032K-R22	Cement	0.22	3W	
R648 ⚠	ERF032K-R22	Cement	0.22	3W	
R649 ⚠	QRG012J-100A	O.M. Film	10	1W	
R650 ⚠	QRG012J-100A	O.M. Film	10	1W	
R651 ⚠	QRD125J-330	U.N.F. Carbon	33	1/2W	
R652 ⚠	QRD125J-330	U.N.F. Carbon	33	1/2W	
R655	QRD141J-821S	Carbon	820	1/4W	
R656	QRD141J-821S	Carbon	820	1/4W	
R657	QRD141J-821S	Carbon	820	1/4W	

⚠: Safety Parts
The column maked with □ indicates the area.
Parts without character in the column are used commonly regardless of delivery area.

Resistors

Item No.	Part Number	Description			□
R658	QRD141J-821S	Carbon	820	1/4W	
R659	QRD141J-821S	Carbon	820	1/4W	
R660	QRD141J-821S	Carbon	820	1/4W	
R661	QRD141J-821S	Carbon	820	1/4W	
R662	QRD141J-821S	Carbon	820	1/4W	
R701	QRD141J-272S	Carbon	2.7K	1/4W	
R702	QRD141J-272S	Carbon	2.7K	1/4W	
R703	QRD141J-183S	Carbon	18K	1/4W	
R704	QRD141J-183S	Carbon	18K	1/4W	
R705	QRD141J-104S	Carbon	100K	1/4W	
R706	QRD141J-104S	Carbon	100K	1/4W	
R707	QRD141J-223S	Carbon	22K	1/4W	
R708	QRD141J-223S	Carbon	22K	1/4W	
R709	QRD141J-103S	Carbon	10K	1/4W	
R710	QRD141J-104S	Carbon	100K	1/4W	
R711	QRD141J-473S	Carbon	47K	1/4W	
R712	QRD141J-683S	Carbon	68K	1/4W	
R713	QRD141J-683S	Carbon	68K	1/4W	
R714	QRD141J-822S	Carbon	8.2K	1/4W	
R715 ⚠	QRG022J-122A	O.M. Film	1.2K	2W	
R716	QRD141J-243S	Carbon	24K	1/4W	
R717	QRD141J-183S	Carbon	18K	1/4W	
R718	QRD141J-224S	Carbon	220K	1/4W	
R719 ⚠	QRD145J-470S	Carbon	47	1/4W	
R720	QRD141J-332S	Carbon	3.3K	1/4W	
R721	QRD141J-682S	Carbon	6.8K	1/4W	
R722	QRD141J-472S	Carbon	4.7K	1/4W	
R725	QRD141J-153S	Carbon	15K	1/4W	
R726	QRD141J-153S	Carbon	15K	1/4W	
R751 ⚠	QRG012J-331S	O.M. Film	33	1W	
R752 ⚠	QRG012J-331S	O.M. Film	33	1W	
R753 ⚠	QRD145J-100S	Carbon	10	1/4W	G
R754 ⚠	QRD145J-100S	Carbon	10	1/4W	G
R755 ⚠	QRD145J-100S	Carbon	10	1/4W	G
R756 ⚠	QRD145J-100S	Carbon	10	1/4W	G
R801 ⚠	QRD145J-150S	U.N.F. Carbon	15	1/4W	
R803 ⚠	QRD145J-220S	U.N.F. Carbon	22	1/4W	
R804 ⚠	QRD145J-220S	U.N.F. Carbon	22	1/4W	
R805	QRD141J-153S	Carbon	15K	1/4W	
R806	QRD141J-391S	Carbon	390	1/4W	
R807	QRD141J-223S	Carbon	22K	1/4W	
R808	QRD141J-203S	Carbon	20K	1/4W	

Others

Item No.	Part Number	Part Name	Description	□
FW601	EWR23C-25NN	Flat Wire	Tone L CH	
FW602	EWR23C-25NN	Flat Wire	Tone R CH	
	EWH22A-20RR	Para Wire		
J601	E04365-003	F.W. Socket	Main In	
J751	E03572-007EM	Spk. Terminal		
J752	E03572-007EM	Spk. Terminal		
J753	QMS6302-125	Headphone	(Silver)	
J753	QMS6302-128	Headphone	(Black)	
S601	QST4241-E05	Push Switch		
S602	QST4241-E05	Push Switch		
RT801	E67764-103	R. Terminal		
RT802	E67764-103	R. Terminal		
P801	QVM5005-003	3P Plug Ass'y	EQ	
P803	QVM5005-007	3P Plug Ass'y	FL	
RY701	ESK5D24-215	Relay		
	E70945-H25	Heatsink		
	E300209-015	Heatsink		
	E10963-001	Circuit board		

⚠: Safety Parts
The column maked with □ indicates the area.
Parts without character in the column are used commonly regardless of delivery area.

3-(2) ENE-011 □ Equalizer P. C. Board Ass'y
Note: ENE-011 □ varies according to the areas employed. See note (1) when placing an order.

Note (1)

Designated Areas	P.C. Board Ass'y
U.S.A.,Canada	ENE-011 [A]
Europe, Australia, U. S. Military Market, U. K., Othe Countries	ENE-011 [B]
West Germany	ENE-011 [C]

Note (2)
The symbols (赤、黒、白……etc.) on P.C. Board surface are factory process only.

Note (3)
The Marks for Designated Areas

J..... U. S. A.	P, PG.. U. S. Military Market
C..... Canada	BS..... U. K.
E ..... Europe	A..... Australia
G..... West Germany	U..... Other Countries

No mark indicates all areas.

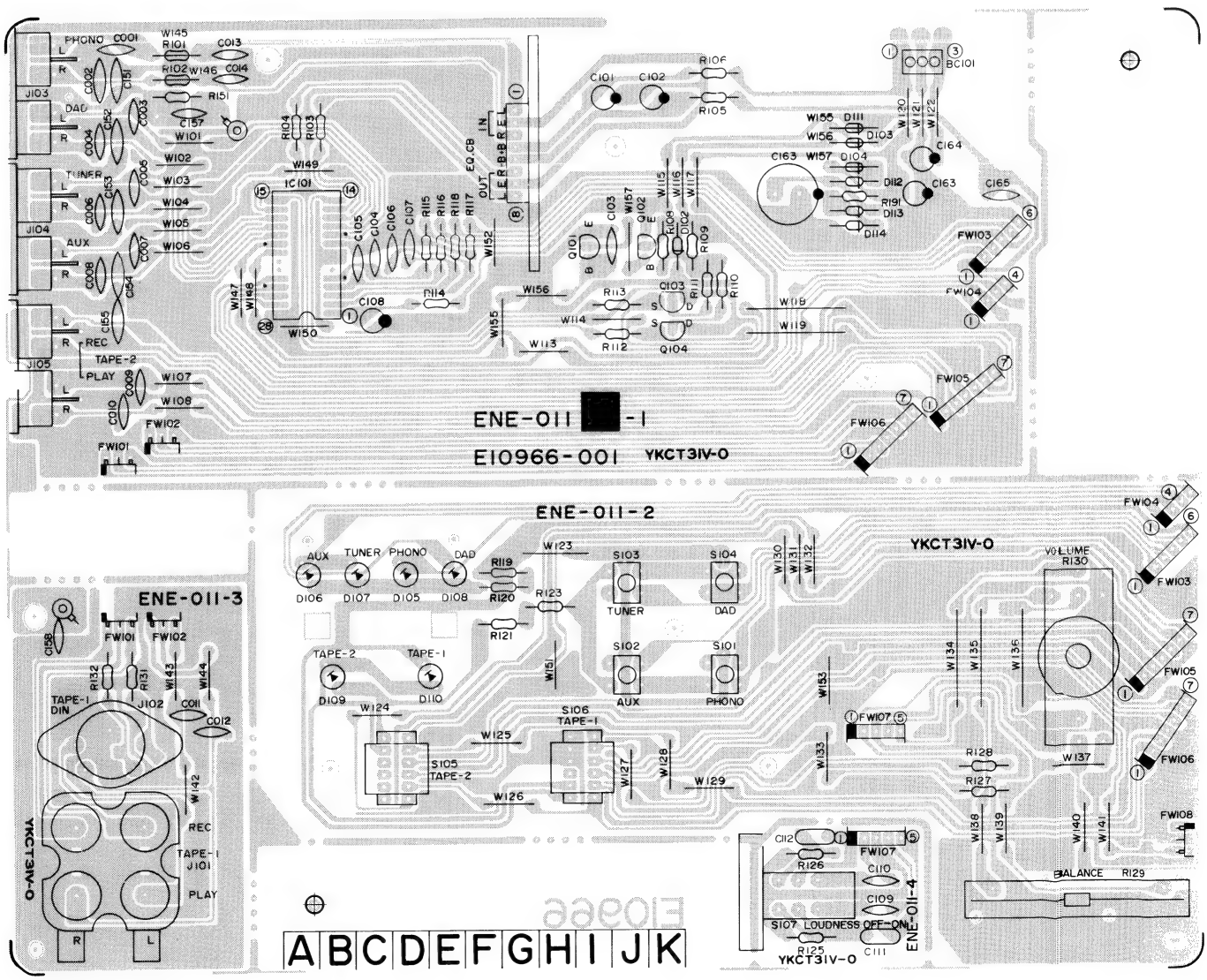


Fig. 4

Each Individual P.C. Board Location

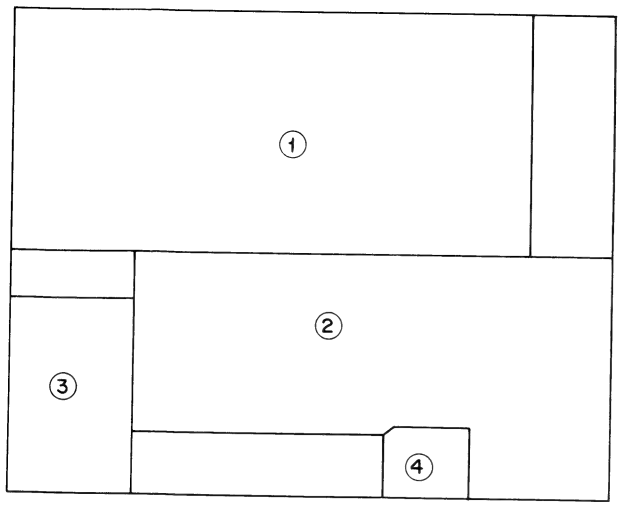


Fig. 5

① EQ Amp and Analog Switch P. C. Board Ass'y
② Source Switch and Volume P. C. Board Ass'y
③ Tape 1 Input P. C. Board Ass'y
④ Loudness Switch P. C. Board Ass'y

Transistors

Item No.	Part Number	Description		□
			Maker	
Q101	DTC144N	Silicon	Rohm	
Q102	DTA144N	Silicon	Rohm	
Q103	2SK 105 (H)	F. E. T.	NEC	
Q104	2SK 105 (H)	F. E. T.	NEC	

IC

Item No.	Part Number	Description		□
			Maker	
IC101	LC7815H		Sanyo	

Diodes

Item No.	Part Number	Description		□
			Maker	
D102	1S2076-31	Silicon	Hitachi	
D105	SLR-54MC50F165	L. E. D.	Rohm	
D106	SLR-54MC50F165	L. E. D.	Rohm	
D107	SLR-54MC50F165	L. E. D.	Rohm	
D108	SLR-54MC50F165	L. E. D.	Rohm	
D109	SLR-54VC50F165	L. E. D.	Rohm	
D110	SLR-54VC50F165	L. E. D.	Rohm	

Capacitors

Item No.	Part Number	Description			□
C101	QETC1CM-476Z	Electro	47μ	16V	
C102	QETC1CM-476Z	Electro	47μ	16V	
C104	QCS31HJ-101Z	Ceramic	10P	50V	
C105	QCS31HJ-101Z	Ceramic	10P	50V	
C106	QCS31HJ-101Z	Ceramic	10P	50V	
C107	QCS31HJ-101Z	Ceramic	10P	50V	
C108	QETC1HM-475Z	Electro	4.7μ	50V	
C109	QCS31HJ-181Z	Ceramic	180P	50V	
C110	QCS31HJ-181Z	Ceramic	180P	50V	
C111	QFN31HK-333Z	Mylar	0.033μ	50V	
C112	QFN31HK-333Z	Mylar	0.033μ	50V	
C165	QCF31HP-473Z	Ceramic	0.047μ	50V	

Resistors

Item No.	Part Number	Description			□
R103	QRD141J-471S	Carbon	470	1/4W	
R104	QRD141J-471S	Carbon	470	1/4W	
R105	QRD141J-101S	Carbon	100	1/4W	
R106	QRD141J-101S	Carbon	100	1/4W	
R108	QRD141J-103S	Carbon	10K	1/4W	
R109	QRD141J-823S	Carbon	82K	1/4W	
R110	QRD141J-103S	Carbon	10K	1/4W	
R111	QRD141J-103S	Carbon	10K	1/4W	
R112	QRD141J-102S	Carbon	1K	1/4W	
R113	QRD141J-102S	Carbon	1K	1/4W	
R114	QRD141J-104S	Carbon	100K	1/4W	
R115	QRD141J-103S	Carbon	10K	1/4W	
R116	QRD141J-103S	Carbon	10K	1/4W	
R117	QRD141J-103S	Carbon	10K	1/4W	
R118	QRD141J-103S	Carbon	10K	1/4W	
R119	QRD141J-271S	Carbon	270	1/4W	
R120	QRD141J-271S	Carbon	270	1/4W	
R121	QRD141J-271S	Carbon	270	1/4W	
R123	QRD141J-271S	Carbon	270	1/4W	
R127	QRD141J-472S	Carbon	4.7K	1/4W	
R128	QRD141J-472S	Carbon	4.7K	1/4W	
R129	QVZ5205-001	Variable	250K (W)		
R130	QVN9A3B-5F5V	Variable	250K (B)		

Others

Item No.	Part Number	Description	□
S101	ESP0001-007	Push Switch	
S102	ESP0001-007	Push Switch	
S103	ESP0001-007	Push Switch	
S104	ESP0001-007	Push Switch	
S105	QST0101-E01	Push Switch	
S106	QST0101-E01	Push Switch	
S107	QST2101-E08	Push Switch	
	EMN00TV-402A	4P Pin Jack	
	EMN00TP-403A	4P Pin Jack	
	E03623-003	DIN Socket	*
	E10966-001	Circuit board	

* Except J, C.

⚠ : Safety Parts
The column maked with □ indicates the area.
Parts without character in the column are used commonly regardless of delivery area.

3-(3) ENH-025 □ Mojulie P.C. Board Ass'y

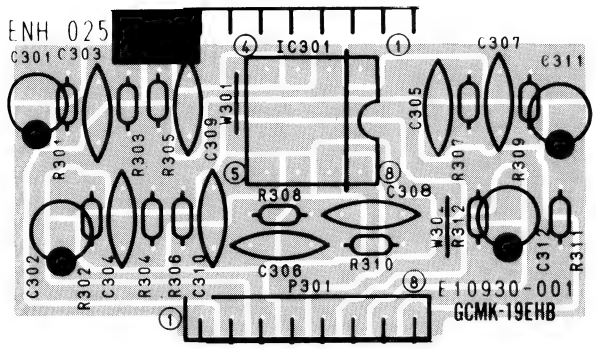


Fig. 6

Item No.	Part Number	Description			□
				Maker	
IC301	NJM4558D	I,C		Dainichi	
C301	QEK61EM-475Z	Electro	4.7μ	25V	
C302	QEK61EM-475Z	Electro	4.7μ	25V	
C303	QCY31HK-101Z	Ceramic	100P	50V	
C303	QCY31HK-561Z	Ceramic	560P	50V	G
C304	QCY31HK-101Z	Ceramic	100P	50V	
C304	QCY31HK-561Z	Ceramic	560P	50V	G
C305	QCY31HK-182Z	Ceramic	1800P	50V	
C306	QCY31HK-182Z	Ceramic	1800P	50V	
C307	QCY31HK-682Z	Ceramic	6800P	50V	
C308	QCY31HK-682Z	Ceramic	6800P	50V	
C309	QCY31HK-101Z	Ceramic	100P	50V	
C310	QCY31HK-101Z	Ceramic	100P	50V	
C311	QEK61EM-475Z	Electro	4.7μ	25V	
C312	QEK61EM-475Z	Electro	4.7μ	25V	
R301	QRD161J-222	Carbon	2.2K	1/4W	
R302	QRD161J-222	Carbon	2.2K	1/4W	
R303	QRD161J-473	Carbon	47K	1/4W	
R304	QRD161J-473	Carbon	47K	1/4W	
R305	QRD161J-751	Carbon	750	1/4W	
R306	QRD161J-751	Carbon	750	1/4W	
R307	QRD161J-393	Carbon	39K	1/4W	
R308	QRD161J-393	Carbon	39K	1/4W	
R309	QRD161J-474	Carbon	470K	1/4W	
R310	QRD161J-474	Carbon	470K	1/4W	
R311	QRD161J-104	Carbon	100K	1/4W	
R312	QRD161J-104	Carbon	100K	1/4W	
	E10930-001	Circuit Board			
P301	EMV5101-008B	Plug Ass'y			

3-(4) ENH-021 □ Fluorescent Lamp P.C.Board Ass'y
Note ENH-021 □ varies according to the areas employed. See note (1) when placing an order.

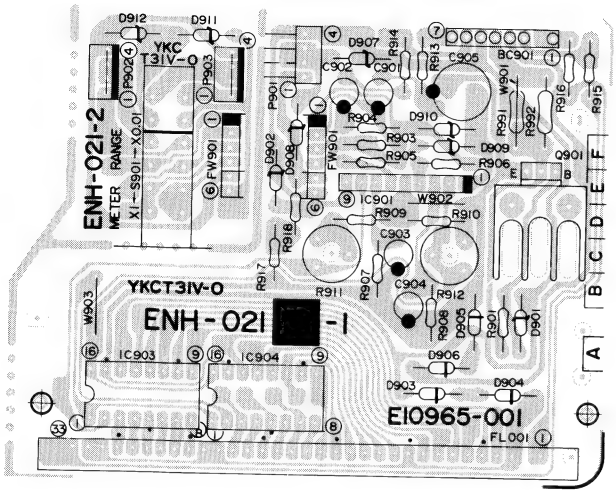
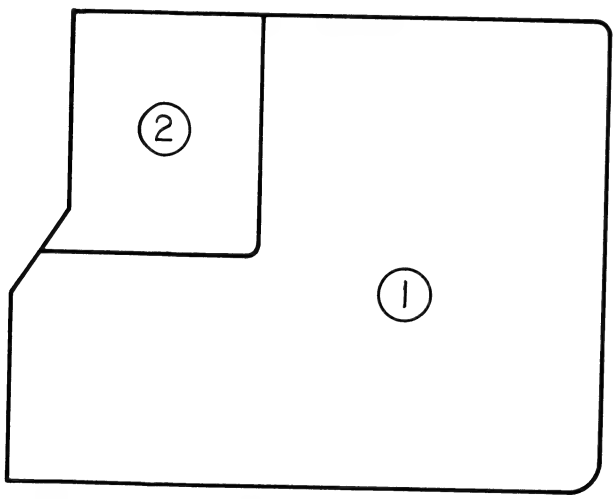


Fig. 7

Each Individual P. C. Board Loaction



① Fluorescent Lamp P.C.Board Ass'y
② Meter Range Switch P.C.Board Ass'y

Fig. 8

Note (1)

Designated Areas	P.C. Board Ass'y
U.S.A.,Canada	ENH-021 D
Other Areas	ENH-011 E

Transistor

Item No.	Part Number	Description		□
			Maker	
Q901	2SB507V (E)		Sanyo	

⚠: Safety Parts
The column maked with □ indicates the area.
Parts without character in the column are used commonly regardless of delivery area.

ICs

Item No.	Part Number	Description		□
			Maker	
IC901	TA7318P (1,2)		Toshiba	
IC903	HA12010		Hitachi	
IC904	HA12010		Hitachi	

Diodes

Item No.	Part Number	Description		□
			Maker	
D901	RD18EB3	Zener	NEC	
D902	RD2.7EB2	Zener	NEC	
D903	1S2076-31	Silicon	Hitachi	
D904	1S2076-31	Silicon	Hitachi	
D905	1S2076-31	Silicon	Hitachi	
D906	1S2076-31	Silicon	Hitachi	
D907	RD8.2EB3	Zener	NEC	
D908	RD8.2EB3	Zener	NEC	

Capacitors

Item No.	Part Number	Description			□
C901	QETC1HM-105Z	Electro	1μ	50V	
C902	QETC1HM-105Z	Electro	1μ	50V	
C903	QETC1HM-105Z	Electro	1μ	50V	
C904	QETC1HM-105Z	Electro	1μ	50V	
C905	QETC1AM-477Z	Electro	470μ	10V	

Resistors

Item No.	Part Number	Description			□
R901	QRD141J-153S	Carbon	15K	1/4W	
R903	QRD141J-303S	Carbon	30K	1/4W	
R904	QRD141J-303S	Carbon	30K	1/4W	
R907	QRD141J-105S	Carbon	1M	1/4W	
R908	QRD141J-105S	Carbon	1M	1/4W	
R909	QRD141J-471S	Carbon	470	1/4W	
R910	QRD141J-471S	Carbon	470	1/4W	
R911	QVZ3501-102	Variable	1K	1/8W	
R912	QVZ3501-102	Variable	1K	1/8W	
R915 ⚠	QRD145J-8R2S	U.N.F. Carbon	8.2	1/4W	J, C
R915 ⚠	QRD145J-100S	U.N.F. Carbon	10	1/4W	
R916 ⚠	QRD145J-8R2S	U.N.F. Carbon	8.2	1/4W	J, C
R916 ⚠	QRD145J-100S	U.N.F. Carbon	10	1/4W	
R917 ⚠	QRZ0062-330	Fusible	33	1/4W	
R918	QRD141J-100	Carbon	10	1/4W	

Others

Item No.	Part Number	Description	□
P901	QMV5004-004	4P Plug Ass'y	
BC901	EWS208-003	Socket Wire Ass'y	
	E69826-H40B	Heatsink	
	ELU0001-010	F. Lamp	
	E67910-001	Spacer	
	E10965-001	Circuit Board	

3-(5) TPS-317 □ Fuse P. C. Board Ass'y

Note (1) The symbols(赤、黒、白……etc.) on P.C. Board surface are factory process only.

■ For Europe, West Germany, Australia and U.K.

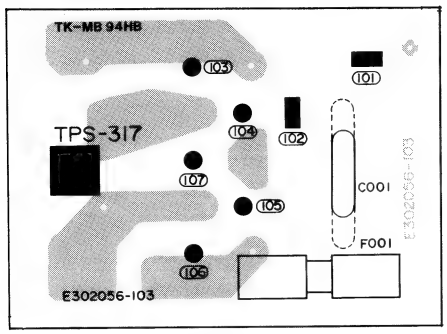


Fig. 9

Capacitors

Item No.	Part Number	Description	□
C001 ⚠	QFZ9020-103	M. Mylar 0.01μ	
C001 ⚠	QFZ9020-103	M. Mylar 0.01μ	BS

Others

Item No.	Part Number	Description	□
	E302056-103	Circuit Board	
	E302056-103 BS	Circuit Board	BS
	E43727-002	Tab	
	EMG7331-001	Fuse Clip	
	E65508-001	Tab	

⚠ : Safety Parts

BS indicates U.K.

■ For other countries

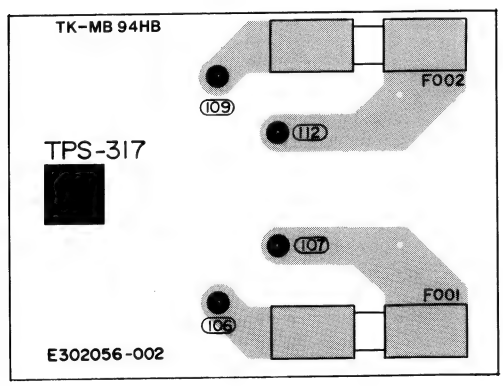


Fig. 10

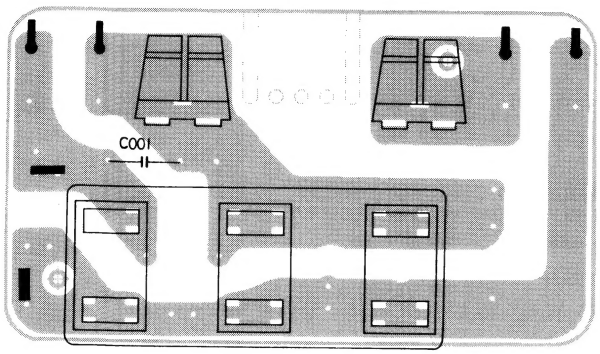
Others

Item No.	Part Number	Description	□
	E302056-002	Circuit Board	
	E43727-002	Tab	
	EMG7331-001	Fuse Clip	
	MLE4758	Wire & SPA	

⚠ :Safety Parts

3-(6) TPS-255 □ AC Outlet P. C. Board Ass'y
Note (1) The symbols (赤、黒、白……etc.) on P.C. Board surface are factory process only.

■ For U.S.A. and Canada



Capacitor

Item No.	Part Number	Description	□
C001 ⚠	QCZ9019-103	Ceramic 0.01μ	

Others

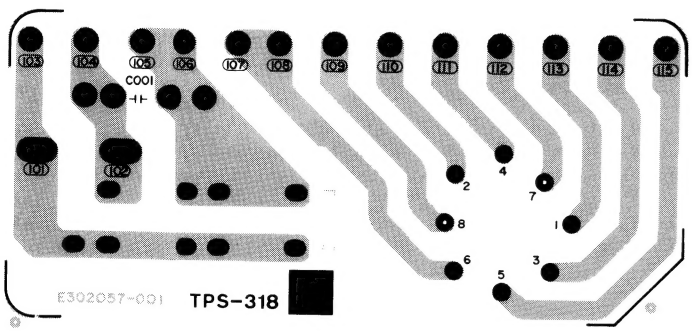
Item No.	Part Number	Description	□
	E66003-005	Circuit Board	
⚠	QMC0637-004	3P AC Socket	
	E03675-004	Fuse Clip	
	E43727-001	Tab	
	E65508-001	Tab	

⚠ :Safety Parts

Fig. 11

3-(7) TPS-318 □ Voltage Selector P. C. Board Ass'y
Note (1) The symbols (赤、黒、白……etc.) on P.C. Board surface are factory process only.

■ For Other Countries



Capacitor

Item No.	Part Number	Description	□
C001 ⚠	QFH53BM-103M	M. Mylar 0.01μ	

Others

Item No.	Part Number	Description	□
	E302057-001	Circuit Board	
⚠	QSR0085-006U	Voltage Selector Switch	
⚠	QMC0637-004	3P AC Outlet	
	E4327-001	Tab	
	E65508-001	Tab	

⚠ : Safety Parts

Fig. 12

4. Packing Materials and Part Numbers

The Marks for Designated Areas

J.....	U. S. A.	P, PG..	U. S. Military Market
C.....	Canada	BS.....	U. K.
E	Europe	A.....	Australia
G.....	West Germany	U.....	Other Countries

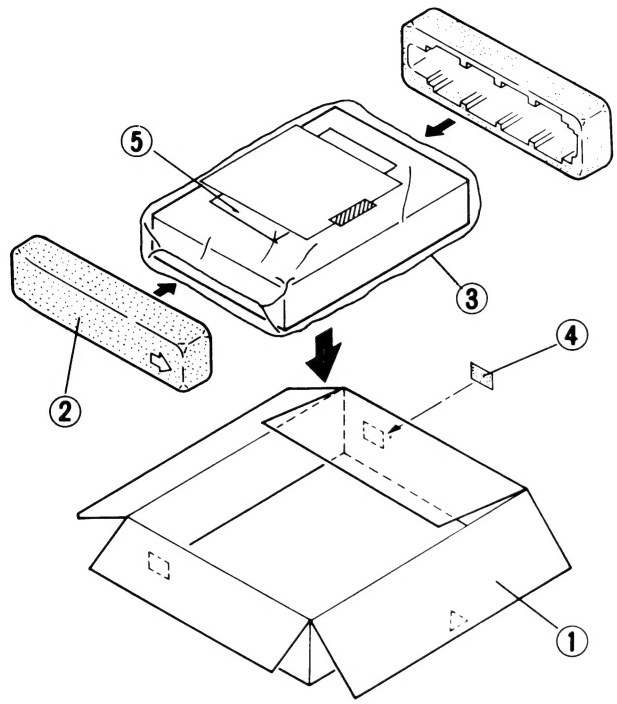


Fig. 13

No.	Part Number	Part Name	Q'ty	Description	Area
1	PK-AK300E	Packing Case	1	(S), E300382-399	
	PK-AK300BE	Packing Case	1	(B), E300382-400	
2	NZ-AK300E	Fillers	1	E24769-002(L)	
			1	E24769-001(R)	
3	E68142-012	Protect Sheet	1		J, C, U, P, PG, E, G, A
	E68142-012B	Protect Sheet	1		BS
4	E35246-001	Serial Label	2		J, C, U, P, PG, BS,A
	E35246-004	Serial Label	2		E
	E35246-006	Serial Label	2		G
5	E35497-017	110V Caution Sheet	1		P
	E35497-019	220V Caution Sheet	1		U, PG

(S) and (B) in the Description column indicate silver and black versions.

5. Accessories List

Part Name	Part Number	Area
Siemens Plug	E04056	U
Warning Label	E60965-001BS	BS
Tie Band	E33754-001	
Instruction Book	E30580-1182A	J, C, U P, PG, E, G, A
Instruction Book	E30580-1182ABS	BS
Envelope (for Instruction Book)	E41202-2	J, C, U, P, PG, E, G, A
Envelope (for Instruction Book)	E41202-2B	BS
Envelope (for Warranty Card)	E66416-003	J
JVC Safety Instruction Sheet	BT20044D	J
Warranty Card	BT20064	G
Warranty Card	BT20048A	J, P, PG
Warranty Card	BT20025H	C
Warranty Card	BT20029C	A
Warranty Card	BT20060	BS
JVC Service Information Card	BT20046B	J, P, PG
FTZ Information	BT20054-006A	G
Service Center List	BT20071	C
EEC Agency	BT20066	G, BS

The Marks for Designated Areas

J..... U. S. A.
C..... Canada
E..... Europe
G..... West Germany
A..... Australia
P, PG..... U. S. Military Market
BS..... U. K.
U..... Other Countries

6. Wiring Diagram